

XII.—*On a small Collection of Lepidoptera from Cape York and the South-east Coast of New Guinea.* By ARTHUR G. BUTLER, F.L.S., F.Z.S., &c.

THE following species were recently obtained by the British Museum from the Rev. J. S. MacFarlane. Several of them are new to science; and others have hitherto been poorly represented in the collection. Excepting where New Guinea is mentioned, the species are from Cape York.

RHOPALOCERA.

Family Nymphalidæ.

Subfamily DANAINÆ, Bates.

Genus DANAIS, Latreille.

1. *Danais archippus.*

Papilio archippus, Fabricius, Ent. Syst. iii. 1, p. 49 (1793).

2. *Danais affinis.*

Papilio affinis, Fabricius, Syst. Ent. p. 511 (1775).

Genus EUPLÆA, Fabricius.

3. *Euplæa Angasii.*

Euplæa Angasii, Felder, Reise der Nov., Lep. ii. p. 343 ("1865").

We have a long series of this species; it only occurs in Australia.

4. *Euplæa sylvester.*

Papilio sylvester, Fabricius, Ent. Syst. iii. 1, p. 41 (1793).

Genus CALLIPLÆA, Butler.

5. *Calliplæa niveata.*

Calliplæa niveata, Butler, Trans. Ent. Soc. Lond. p. 2 (1875).

Genus HAMADRYAS, Boisduval.

6. *Hamadryas zoilus.*

Papilio zoilus, Fabricius, Syst. Ent. p. 480 (1775).

Subfamily SATYRINÆ, Bates.

Genus HYPOCYSTA, Westwood.

7. *Hypocysta adiante.*

Neonympha adiante, Hübner, Zutr. ex. Schmett. figs. 545, 546 (1825).

Subfamily NYMPHALINÆ, Bates.

Genus DOLESCHALLIA, Felder.

8. *Doleschallia australis*.

Doleschallia australis, Felder, Reise der Nov., Lep. iii. p. 405, pl. 51. figs. 1, 2 (1867).

Genus NEPTIS, Fabricius.

9. *Neptis consimilis*.

Limenitis consimilis, Boisduval, Voy. de l'Astrolabe, Lép. p. 133. n. 5 (1832).

Not previously in the Museum. It is quite distinct from the Aru species *N. affinis* of Felder.

10. *Neptis mortifacies*.

Neptis mortifacies, Butler, Trans. Ent. Soc. p. 5 (1875).

Only one example of this species, from Queensland, was previously in the collection of the British Museum.

11. *Neptis latifasciata*.

Neptis latifasciatus, Butler, Trans. Ent. Soc. p. 4 (1875).

The same observation applies to this species as to the preceding.

Genus RHINOPALPA, Felder.

12. *Rhinopalpa parva*, n. sp.

Wings above dark brown, with a broad central ochreous band from costa of primaries to near anal angle of secondaries; outer border paler brown, bounded within and intersected by a line of black; primaries with a tawny spot in the cell, just above the origin of the first median branch; a subapical series of decreasing pale ochraceous spots; wings below pale olive-brown, with a broad central creamy band; basal area externally edged with dark brown, and crossed by brown-edged pale bands; external area crossed by a series of blind ocelli; outer border creamy, varied with brown, and intersected by a lunulate brown submarginal line in both wings and by two in the secondaries. Expanse of wings 2 inches 7 lines.

This is the smallest *Rhinopalpa* that I have seen; it is very different from any other species known to me.

Genus DIADEMA, Boisduval.

13. *Diadema nerina* (♂ ♀).

Papilio nerina, Fabricius, Syst. Ent. iii. 1, p. 509 (1775).
Smaller than usual; otherwise perfectly typical.

14. *Diadema alimena* (♂ ♀).

Papilio alimena, Linnæus, Mus. Lud. Ulr. p. 291 (1764).
Also var. *P. velleda* of Cramer (pl. 349. f. C, D).

Genus CETHOSIA, Fabricius.

15. *Cethosia imperialis*, n. sp.

Wings above black-brown, distinctly shot with purple; basal area broadly scarlet; a discal series of indistinct reddish lituræ; fringe white-varied; primaries with a broad quinquefid snow-white subapical patch; three or four subcostal discoidal spots; secondaries with an ill-defined submarginal lunated line. Below paler than above: primaries with basal half reddish tawny, transversely marked on costal half of cell and at base of median interspaces with black strigæ margined or intersected by grey lines; subapical white patch as above; submarginal area and veins red-brown; a discal series of more or less fusiform white-margined black spots; outer margin black; a submarginal lunated white line; secondaries with several red spots on basicostal area; a subbasal transverse grey band, enclosing a double series of black strigæ; an irregular series of grey-edged black spots across middle of wing; a discal series of more or less reniform grey-edged black spots; outer margin black; a submarginal lunated white line. Expanse of wings 3 inches 10 lines.

Four examples.

We previously only possessed two specimens of this species, which, owing to their general similarity to *C. damasippe*, I was unwilling to describe. There can now be no doubt that the species does not vary.

Family Lycænidaæ.

Genus DANIS, Fabricius.

16. *Danis* close to *D. damis*; perhaps a variety. In poor condition.

Genus AMBLYPŌDIA, Horsfield.

17. *Amblypodia amytis* (local form).

We previously possessed one example of each of these forms.

Family Papilionidæ.

Subfamily PIERINÆ, Bates.

Genus DELIAS, Hübner.

18. *Delias inferna* (♀).

Delias inferna, Butler, Lep. Exot. p. 63, pl. 24. fig. 6 (1871).

Genus TERIAS, Swainson.

19. *Terias puella*.

Xanthidia puella, Boisduval, Voy. de l'ASTROLABE, Lép. p. 60, pl. 2. fig. 8 (1832).

20. *Terias hecabe*.

Papilio hecabe, Linnæus, Mus. Lud. Ulr. p. 249 (1764).

Genus BELENOIS, Hübner.

21. *Belenois nabis* (♂ ♀).

Pieris nabis, Lucas, Rev. Zool. p. 326 (1852).

Subfamily PAPILIONINÆ, Bates.

Genus ORNITHOPTERA, Boisduval.

22. *Ornithoptera pronomus* (♂ ♀).

Papilio pronomus, G. R. Gray, Cat. p. 2, pl. i. figs. 1 & 2 (1852).

Genus PAPILO, Linnæus.

23. *Papilio cupaneus* (♂ ♀).

Papilio cupaneus, Westwood, Arcana Ent. ii. pl. 52. figs. 1 & 2 (1843).

24. *Papilio adrastus* (♂ ♀).

Papilio adrastus, Felder, Reise der Nov., Lep. i. p. 110, pl. 16, a, b (1865).

New Guinea.

25. *Papilio polydorus* (♂ ♀).

Papilio polydorus, Linnæus, Syst. Nat. i. 2, p. 746 (1767).

26. *Papilio choredon* (♂ ♀).

Papilio choredon, Felder, Verh. zool.-bot. Ges. xiv. p. 306 (1834).

New Guinea and Cape York.

HETEROCERA.

Family Sphingidæ.

Genus CHÆROCAMPA, Duponchel.

27. *Chærocampa argentata*.*Chærocampa argentata*, Butler, Proc. Zool. Soc. p. 8, pl. 2. fig. 3 (1875).

Only one example, in poor condition.

Family Agaristidæ.

Genus AGARISTA, Leach.

28. *Agarista neptioides* (♂ ♀).*Agarista neptioides*, Butler, Ann. & Mag. Nat. Hist. xv. p. 138 (1875).

Family Zygænidæ.

Genus EUCHROMIA, Hübner.

29. *Euchromia ganymede*.*Glaucopis ganymede*, Doubleday, Lort's Disc. Austr., App. i. p. 519, pl. 3. fig. 3.

Family Arctiidæ.

Genus AREAS, Walker.

30. *Areas punctipennis*, n. sp.

Wings white; primaries with the costa scarlet, its front edge blackish; secondaries with a small spot at the end of the cell and three on the outer margin, as also a point at apex, greyish black; head white, scarlet behind; collar with two large central brown spots, rosy along its margins; abdomen scarlet, with dorsal and lateral black spots; body below white, anterior coxæ and front margins of femora scarlet; venter with lateral black spots. Expanse of wings 1 inch 7 lines.

Allied to *A. Moorei* and *A. roseicostis*.

Family Lithosiidæ.

Genus THEMISCYRA, Walker.

31. *Themiscyra varicosa*, n. sp.

Primaries sulphur-yellow; the veins, two oblique bands, and several irregular transverse lituræ vermilion-red; secondaries pale glossy vermilion-red; head and thorax sulphur-

yellow, reticulated with vermilion; abdomen vermilion, spotted with black; wings and body below glossy vermilion, front coxæ yellow. Expanse of wings 1 inch 3 lines.

Allied to *T. latiferu*, but without grey bands or lines in primaries.

Subfamily *HYPsIxÆ*, Butler.

Genus *DAMALIS*, Hübner.

32. *Damalis alciphron*.

Phalæna-Attacus alciphron, Cramer, Pap. Exot. ii. pl. 133. fig. E (1779).
New Guinea.

Family *Chalcosiidae*.

Genus *DYSPHANIA*, Hübner.

33. *Dysphania chalybeata*, n. sp.

Hyaline greyish; markings arranged as in *D. numana* (*Euschema helenetta*, Walker); borders and spots purplish black; submarginal spots barely indicated above, excepting the subapical oblique series in primaries; thorax orange-yellow; abdomen golden yellow, whitish above. Expanse of wings 3 inches 4 lines.

It is just possible that this may prove to be the male of *D. numana*; but I know of no parallel instance of dissimilarity in the sexes. I think it more probable that it is the Australian representative of that species.

Genus *PRÆSOS*, Walker.

34. *Præsos mariana*.

Eusemia mariana, White, Voyage of the 'Rattlesnake.'

Family *Hyblæidae*.

Genus *HYBLÆA*, Fabricius.

35. *Hyblæa puera*.

Phalæna-Noctua puera, Cramer, Pap. Exot. ii. pl. 103. figs. D, E (1779).

Family *Ommatophoridae*.

Genus *PATULA*, Guénée.

36. *Patula MacFarlanei*, n. sp.

Allied to *P. macrops*; larger, greyer in colouring, the ocellus and the dark bar beyond it much more oblique, the subbasal bands of primaries converging towards costa, ill-defined, and

scarcely irregular; no defined transverse bands below the ocellus, the latter with dull clay-coloured zone; submarginal macular band not undulated, each spot lunate; bands of secondaries much wider apart, less strongly defined, more continuous; underside of wings greyer, darker; discal series of white spots smaller, those towards costa of primaries placed more obliquely; outer series obsolete. Expanse of wings 5 inches 8 lines.

A very distinct and well-marked species. Unfortunately only one example was sent, the secondaries of which are somewhat damaged.

Family *Ophiuridæ*.

Genus *OPHISMA*, Guénée.

37. *Ophisma umminia*.

Phalana-Noctua umminia, Cramer, Pap. Exot. iii. pl. 267. fig. F (1782).

Family *Spilomelidæ*.

Genus *PHALANGIODES*, Hübner.

38. *Phalangiodes*, n. sp. (near to *P. neptalis*).

The single example is in poor condition, being much rubbed.

Family *Hyponomeutidæ*.

Genus *ATTEVA*, Walker.

39. *Atteva niviguttella*.

Corinea niviguttella (part.), Walker, Cat. Lep. Het. xxviii. p. 542. n. 1 (1863).

This species was confounded with examples of *Atteva niveigutta*, placed by Walker among the Lithosiides. The genus seems to be most nearly allied to *Cydosia* and *Eggyna*.

XIII.—*On a new Victorian Graptolite.* By FREDERICK M'COY, Professor of Natural Science in the University of Melbourne, &c.

To the Editors of the Annals and Magazine of Natural History.

GENTLEMEN,

As the study of Graptolites seems to have suddenly acquired a new interest in England, and many valuable papers, tending to form soon a good monograph, have lately appeared in your